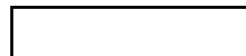
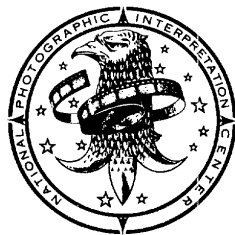


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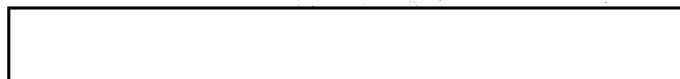


## Basic Imagery Interpretation Report



**NATIONAL  
PHOTOGRAPHIC  
INTERPRETATION  
CENTER**

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## **GOLITSYNO COMMUNICATIONS FACILITY**



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**DEPLOYED COMM/ELEC/RADAR FACILITIES**

**USSR**

**FEBRUARY 1969**

**COPY NO. 105**

**5 PAGES**  
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INSTALLATION OR ACTIVITY NAME <b>Golitsyno Communications Facility</b>				COUNTRY <b>UR</b>	
UTM COORDINATES <b>NA</b>	GEOGRAPHIC COORDINATES <b>55-35-10N 037-00-20E</b>		CATEGORY	REFERENCE	COMBEX NO.
MAP REFERENCE <b>ACIC. US Air Target Chart 200, Sheet M0167-4IHL, 3d ed, Nov 66, Scale 1:200,000</b>					
(SECRET)					
LATEST IMAGERY USED			NEGATION DATE (if required)		
			<b>NA</b>		

### ABSTRACT

The Golitsyno Communications Facility southwest of Moscow appears to be a major microwave relay facility. Six towers of various types, with a minimum of 11 microwave reflectors or horns attached, are in the facility. A possible IIF antenna field is also within the facility. The large number of support buildings present seems to exceed the number necessary for a microwave relay point, indicating the possibility of an additional function for the facility.

### INTRODUCTION

The Golitsyno Communications Facility is 25 nautical miles (nm) southwest of the center of Moscow and 1.7 nm south of the town of Golitsyno, across the road (0.6 nm east) from a secured military installation (Figure 1).

The facility was initially identified as a microwave facility on ground photography of 1958 (Figure 4), and designated the Kobyakovo "Goalpost" (passive microwave reflector array) Facility. Small scale [redacted] photography of [redacted] indicated the presence of a high frequency (HIF) antenna field in the same general area, which was targeted as Golitsyno IIF Communications Facility. Re-examination and analysis of older ground and aerial coverage of the area and current high-resolution photography confirm the existence and collocation of the two facilities and a preponderance of microwave equipment.

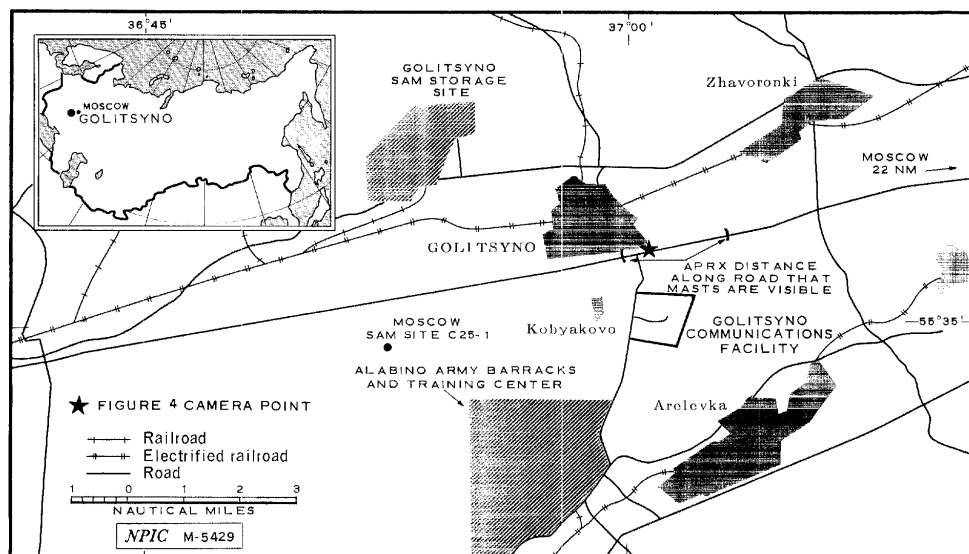


FIGURE 1. LOCATION MAP.

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## BASIC DESCRIPTION

Electronics components at the facility consist of three [redacted] guyed lattice masts, with two microwave dish reflectors at the [redacted] foot level of both the northern and central masts and a probable dish reflector located much lower (not measurable) on the southern mast; a 300-foot masonry tower with an undetermined number of microwave antennas (Figure 3); an approximately 290-foot self-supporting lattice tower with one microwave dish reflector; an 85-foot masonry tower with one visible Vesna horn (approximate [redacted] and possibly other equipment; approximately 30 possible IIF masts; and one unidentified antenna array, 90 feet long by 35 feet high, that may be an ionospheric scatter antenna.

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The dish reflector antennas are identifiable as the R-60/120 microwave system, with an adjacent structure at the base of the supporting mast and a ground-mounted reflector visible in most cases. Although the "Goalpost" arrays seen on the 1958 ground photography were not visible on the [redacted] photography, these arrays are not easily seen and one or both may possibly still be present. Probable Vesna and R-400 antennas are mounted on the 300-foot masonry tower. No azimuths, with the exception of the one Vesna horn on the 85-foot tower, could be measured. Analysis of the possible IIF masts reveals no identifiable antenna pattern. It is possible that these masts serve some purpose other than communications.

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Support structures at the facility include approximately 50 buildings of various sizes. The total available floorspace is 142,000 square feet. Buildings that can be identified by function include the control building at the base of each mast on which reflectors are mounted, the cable-connected [redacted] control building adjacent to the 85-foot tower, a heat/power plant in the support area, and five [redacted] [redacted] housing buildings in the support area.

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## Status and Activity

The first available coverage of this facility is on [redacted] photography of [redacted]. A considerable portion of the area is cloud-covered and hazy, including all areas where electronics components are now emplaced. A comparison of the area in [redacted] with its present appearance shows that the road access and some of the support structures are the same. In [redacted] the facility was in a very early stage of construction. The "Goalpost" support masts probably were not present.

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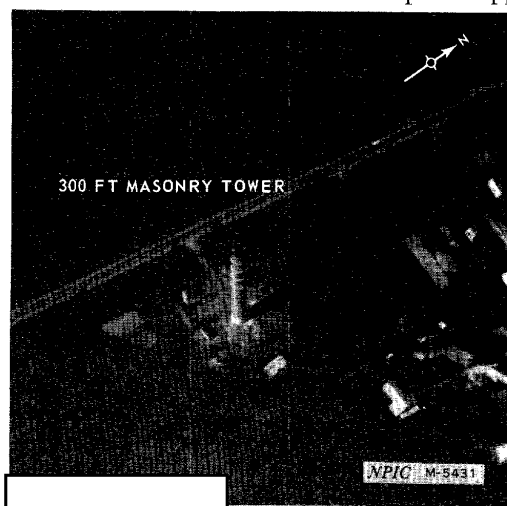


FIGURE 3. MASONRY TOWER.

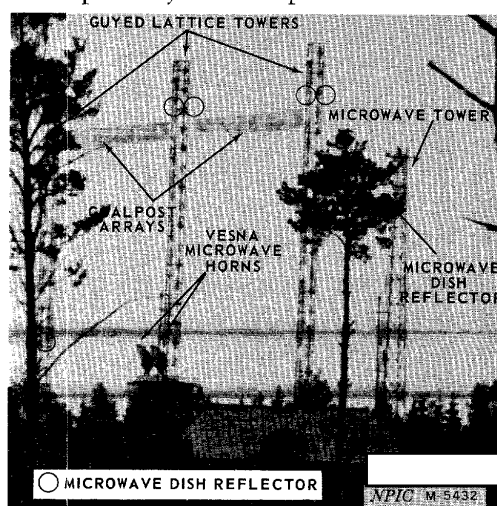


FIGURE 4. MICROWAVE DISH REFLECTORS.

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Ground photography of June 1958 (Figure 4) shows that the three [ ] guyed lattice masts, the approximately 290-foot self-supporting lattice tower, and the 85-foot masonry tower had been erected in the area. Three guyed masts supported two "Goalpost" arrays approximately 300 feet up the masts. These arrays are known to be passive microwave reflectors. A microwave dish reflector was located on the self-supporting lattice tower and two Vesna horns were mounted on the 85-foot masonry tower.

Ground photography of June 1959 showed that the northernmost "Goalpost" array had been removed and that two dish reflectors had been placed on the center guyed lattice tower. Additional coverage was not available until [ ] and further changes in the [ ]

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The large 300-foot masonry tower was first observed in [ ] [ ] Confirmation of microwave antennas on this tower can be made on [ ] photography, the only large-scale coverage of the tower. The exact number of antennas cannot be determined, but there appear to be at least four.

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Photography of [ ] was the first coverage over the support area since [ ] from which an accurate building count could be made. It shows that a housing building was added and another building was removed between [ ] The support area had assumed its present configuration by [ ]

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All available photographic evidence leads to the conclusion that the major construction at this facility occurred between [ ] and [ ] Significant developments since that time have consisted of changing specific antennas.

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### Operational Function

The apparent function of the facility is microwave relay. However, the number of personnel that can be housed in the support area seems excessive for a solely microwave relay function, which is basically a switching and amplification process which can be handled by equipment. The possible HF antennas at the facility and the abundance of support structures also indicate a more extensive function than microwave relay—probably the input and output for microwave systems via the possible HF system. An additional possible function of the facility might be the administrative responsibility related to a specific group of correspondents.

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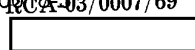
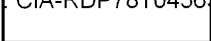
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REFERENCES

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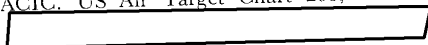
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MAPS OR CHARTS

ACIC. US Air Target Chart 200, Sheet M0167-4HL, 3d ed, Nov 66 (SECRET)



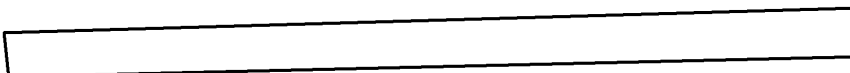
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REQUIREMENT

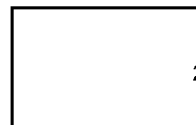
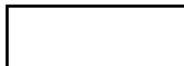
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